

## Summary

### Rebenchmarking of Labour Force estimates

#### OVERVIEW

The ABS re-benchmarks Labour Force data once a quarter (ahead of the release of February, May, August and November issues) to ensure the estimates are based on the most up to date population benchmarks. This publication presents the estimates up to October 2017 based on the revised population benchmarks.

Revisions to original data resulting from rebenchmarking are usually confined to the previous 22 months. However, with the completion of the 2016 Census, preliminary 2016-based ERP population benchmarks are now available. Following consultation with key users, the ABS has rebenchmarked the Labour Force estimates to 2016-based ERP population benchmarks, resulting in revisions to Labour Force estimates for the period from July 2011 onwards (76 months).

Further information on this rebenchmarking process can be found in the article "Major Rebenchmarking of Labour Force Series" in the October 2017 issue of Labour Force, Australia - Rebenchmarked Estimates (cat. no. 6202.0.55.003).

Detailed information on the extent of revisions resulting from rebenchmarking can be derived by comparing the data released in this issue and the data released in the October 2017 issue of Labour Force, Australia (cat. no. 6202.0) on 16 November 2017.

Incorporating the latest revised population benchmarks has resulted in minor revisions across the Labour Force series. The population benchmarks were revised from July 2011 to October 2017, however minor revisions to seasonally adjusted and trend estimates will also occur throughout the time series due to concurrent seasonal adjustment.

The ABS will continue with the regular quarterly rebenchmarking, as per the process outlined in the article 'Rebenchmarking of Labour Force Series', published in the February 2015 issue of Labour Force, Australia (cat. no. 6202.0).

Users of this rebenchmarking product are encouraged to compare data with that included in the previous release of Labour Force, Australia (cat. no. 6202.0). However, these rebenchmarked estimates are produced for information only, and should not be considered a replacement for the estimates in Labour Force, Australia (cat. no. 6202.0).

### Major Rebenchmarking of Labour Force Series

#### MAJOR REBENCHMARKING OF LABOUR FORCE SERIES

##### Overview

"Benchmarks" refer to the population estimates that Labour Force Survey (LFS) data are aligned to, so that they effectively represent the population. That is, how the large monthly sample of 50,000 people can effectively represent the 20 million usually resident civilian population aged 15 years and over.

Every five years, population estimates are updated to include the latest information from the Census, and this updated information is used to "rebenchmark" the Labour Force estimates.

This article provides a simple explanation of what "rebenchmarking" is, the reasons for rebenchmarking and the impacts on Labour Force estimates.

##### From benchmarks to estimates

Labour Force statistics measure key aspects of the Australian labour market, and provide some of the most important economic and social indicators. For this reason, it is important to ensure that Labour Force statistics are of the highest quality, and most effectively represent the labour market status of the population.

There are two key inputs to the Labour Force estimates:

- A measure of the size and profile of the population potentially available to the labour force; and
- The labour force status of people in the population.

The first of these are population benchmarks, which are based on population estimates, while the second is based on the data that are collected in the LFS.

To produce Labour Force estimates, data from the LFS are "weighted up" to the total population benchmarks. Since only a sample of the population can be surveyed every month, this weighting process transforms the survey data into representative estimates, which provide a picture of the entire population.

## Rebenchmarking to 2016-based benchmarks

Rebenchmarking is the process of updating the total population figures that the Labour Force estimates are weighted up to, as new Estimated Resident Population (ERP) figures become available in Australian Demographic Statistics (cat. no. 3101.0).

Prior to this release, Labour Force estimates were based on 2011 Census-based benchmarks. Following consultation with key users, the ABS has rebenchmarking the Labour Force estimates to 2016-based ERP population benchmarks, resulting in revisions to Labour Force estimates for the period from July 2011 onwards.

Rebenchmarking estimates will be progressively released from 7 December to 21 December 2017, per the following schedule:

- Rebenchmarking person estimates in *Labour Force, Australia - Rebenchmarking Estimates, Oct 2017* (cat. no. 6202.0.55.003) on 7 December 2017;
- Rebenchmarking hours worked estimates in *Labour Force, Australia, Nov 2017* (cat. no. 6202.0) – Tables 19 and 20 – on 14 December 2017;
- Rebenchmarking detailed monthly data in *Labour Force, Australia, Detailed - Electronic Delivery, Nov 2017* (cat. no. 6291.0.55.001) – on 21 December 2017; and
- Rebenchmarking detailed quarterly data in *Labour Force, Australia, Detailed, Quarterly, Nov 2017* (cat. no. 6291.0.55.003) – on 21 December 2017.

Labour Force statistics will undergo a second major rebenchmarking to the final 2016-based ERP population benchmarks, in December 2018.

The ABS will also continue with the regular quarterly rebenchmarking, as per the process outlined in the article 'Rebenchmarking of Labour Force Series', published in the February 2015 issue of *Labour Force, Australia* (cat. no. 6202.0).

### What is the impact of Rebenchmarking on the Labour Force estimates?

While rebenchmarking results in revisions to published data, it does not generally result in any material change to headline indicators (e.g. unemployment rates, participation rates or employment to population ratios) at the Australia or state and territory levels. Changes to the population benchmarks are more likely to impact on estimates that are directly related to the size of the population (e.g. the number of employed people).

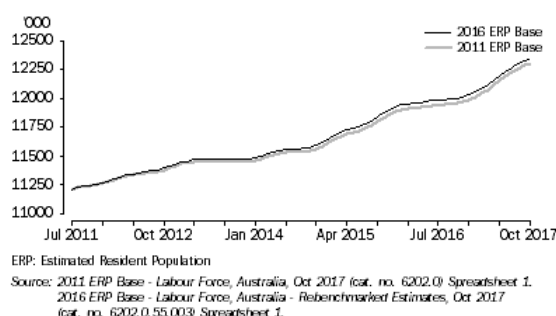
Changes in population composition such as age, sex or region of residence may result in a different rate of change, particularly at finer levels of geography. A summary of the impact of the major rebenchmarking is outlined below.

- The overall labour market narrative is unchanged as a result of rebenchmarking, with the headline unemployment rate, participation rate and employment to population ratio showing very little change. For example, as at October 2017, the change to the trend unemployment rate was less than 0.1 percentage points at the Australia level.
- As at October 2017, trend employment has been revised upwards by around 40,000 persons, while the number of unemployed persons was revised up by around 500 persons.
- For the rebenchmarking period (July 2011 to October 2017), the median change to the trend estimate of employed persons was a 27,500 person increase. The magnitude of change increases through the series with the July 2011 difference being 1,100 (0.009%) and the October 2017 difference being 41,700 (0.34 per cent). The impact on state trend employment estimates are also relatively small, with the largest changes in Victoria (up around 55,000) and Western Australia (down around 35,000).
- There have been no changes to survey content or questionnaire design as part of the rebenchmarking process.

**Table 1: Trend Estimates, October 2017**

Trend - Australia	Rebenchmarking (2016 ERP Base)	Pre- Rebenchmarking (2011 ERP Base)	Difference	Difference (%)
Employed ('000)	12342.9	12301.2	41.7	0.34
Unemployed ('000)	709.9	709.4	0.5	0.08
Unemployment Rate (%)	5.4	5.5	-0.01	-0.25
Employment to Population Ratio (%)	61.7	61.7	0.08	0.13
Participation Rate (%)	65.3	65.2	0.08	0.12

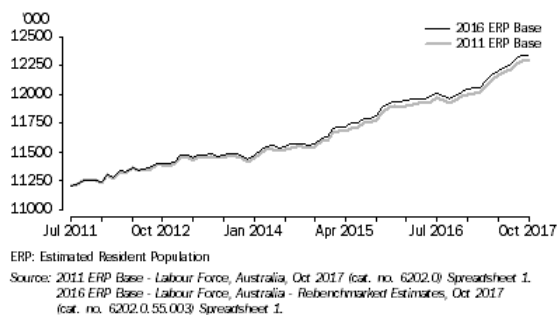
**Graph 1: Trend employed persons, Australia, July 2011 to October 2017**



**Table 2: Seasonally Adjusted Estimates, October 2017**

Seasonally Adjusted - Australia	Rebenchmarked (2016 ERP Base)	Pre- Rebenchmarked (2011 ERP Base)	Difference	Difference (%)
Employed ('000)	12337.8	12297.1	40.7	0.33
Unemployed ('000)	702.4	701.5	0.9	0.13
Unemployment Rate (%)	5.4	5.4	0.00	0.00
Employment to Population Ratio (%)	61.7	61.6	0.10	0.16
Participation Rate (%)	65.2	65.1	0.10	0.15

**Graph 2: Seasonally Adjusted Employed Persons, Australia, July 2011 to October 2017**



## About this Release

Summary results of the October 2017 Labour Force Survey benchmarked to the November 2017 estimates of the civilian population and containing estimates of employed and unemployed persons classified by sex, full-time/part-time status, states and territories and persons not in the labour force.

## Explanatory Notes

### Time Series Spreadsheet (I-Note) - Time Series Spreadsheet

Rebenchmarked hours worked estimates will be released in *Labour Force, Australia, Nov 2017* (cat. no. 6202.0) on 14 December and in future issues of *Labour Force, Australia - Rebenchmarked Estimates* (cat. no. 6202.0.55.003).

### Time Series Spreadsheet (I-Note) - Time Series Spreadsheet

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